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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,921	10/17/2003	Warwick Britton	13311.1002U	8561

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EXAMINER	
BRISTOL, LYNN ANNE	

ART UNIT	PAPER NUMBER
1643	

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,921	BRITTON ET AL.	
	Examiner	Art Unit	
	Lynn Bristol	1643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-49 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-49 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 12 and 13 are drawn to scFv/antigen complexes wherein the antigen is chemically cross-linked to the scFv or comprises a fusion protein with the scFv molecule, respectively. Claims 12 or 13 have been restricted as species as set forth below, and to the extent one of the Groups for an scFv-antigen complex is elected, then Applicants are required to elect a species of Claim 12 or 13.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:-

A. Polypeptides:

1. Claims 1-2, 3 in part and 6-8, drawn to scFv comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), classified in class 424, subclass 135.1.
2. Claims 1-2, 3 in part, 6-8, drawn to scFv comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), classified in class 424, subclass 135.1.
3. Claims 1-2, 3 in part, 6-8, drawn to scFv comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), classified in class 424, subclass 135.1.
4. Claims 1-2, 3 in part, 6-8, drawn to scFv comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), classified in class 424, subclass 135.1.

5. Claims 1-2, 3 in part, 6-8, drawn to scFv comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, classified in class 424, subclass 135.1.

6. Claims 1-2, 3 in part, 5-8, drawn to scFv comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, classified in class 424, subclass 135.1.

7. Claims 1-2, 3 in part, 4, 6-10, drawn to scFv comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, classified in class 424, subclass 135.1.

8. Claims 1-2, 3 in part, 6-8, drawn to scFv comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, classified in class 424, subclass 135.1.

9. Claims 1-2, 3 in part, 6-8, drawn to scFv comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), classified in class 424, subclass 135.1.

10. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

11. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, drawn to scFv-antigen complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

12. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

13. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

14. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

15. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

16. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, drawn to scFv-antigen complex comprising VH and VL which binds to an

APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

17. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, class 424, subclass 179.1.

18. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

19. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

20. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

21. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

22. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

23. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

24. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

25. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

26. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface

molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

27. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

28. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

29. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

30. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

31. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface

molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

32. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

33. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

34. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

35. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

36. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

37. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

38. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

39. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

40. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

41. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

42. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule,

wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

43. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

44. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

45. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

46. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

47. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

48. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

49. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

50. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

51. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

52. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

53. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule,

wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

54. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, drawn to scFv-antigen complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

55. Claims 1-2, 3 in part and 6-8, 11, 14-18, 19 in part, 20 in part, 21-22, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

56. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, 21-22, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

57. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, 21-22, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

58. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, 21-22, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

59. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, 21-22, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

60. Claims 1-2, 3 in part, 5-8, 11, 14-18, 19 in part, 20 in part, 21-22, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

61. Claims 1-2, 3 in part, 4, 6-10, 11, 14-18, 19 in part, 20 in part, 21-25, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

62. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, 21-22, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

63. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, 21-22, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

64. Claims 1-2, 3 in part and 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

65. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

66. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

67. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

68. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

69. Claims 1-2, 3 in part, 5-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

70. Claims 1-2, 3 in part, 4, 6-10, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

71. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

72. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

73. Claims 1-2, 3 in part and 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

74. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

75. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

76. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

77. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

78. Claims 1-2, 3 in part, 5-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

79. Claims 1-2, 3 in part, 4, 6-10, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

80. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

81. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, 20 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

82. Claims 1-2, 3 in part and 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

83. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

84. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

85. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, class 424, subclass 181.1.

86. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

87. Claims 1-2, 3 in part, 5-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

88. Claims 1-2, 3 in part, 4, 6-10, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

89. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

90. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

91. Claims 1-2, 3 in part and 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

92. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

93. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule,

wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

94. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

95. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

96. Claims 1-2, 3 in part, 5-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

97. Claims 1-2, 3 in part, 4, 6-10, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

98. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

99. Claims 1-2, 3 in part, 6-8, 11, 14-18, 19 in part, drawn to scFv-antigen-lipid complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

100. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

101. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

102. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

103. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86),

and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

104. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

105. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

106. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

107. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

108. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

109. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

110. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

111. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

112. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds

to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

113. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

114. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

115. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

116. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor,

and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

117. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

118. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

119. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

120. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

121. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

122. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

123. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

124. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

125. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds

to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

126. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

127. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

128. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

129. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

130. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

131. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

132. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

133. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

134. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

135. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

136. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

137. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

138. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

139. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

140. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

141. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

142. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

143. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

144. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-12 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

145. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is

mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

146. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

147. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

148. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

149. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

150. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

151. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

152. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

153. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

154. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which

binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

155. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

156. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

157. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

158. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

159. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

160. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

161. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

162. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

163. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which

binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

164. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

165. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

166. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

167. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

168. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

169. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

170. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

171. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

172. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an

APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

173. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

174. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

175. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

176. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

177. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

178. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

179. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

180. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

181. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

182. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1),

and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

183. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

184. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

185. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

186. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

187. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

188. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

189. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-6 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

190. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

191. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

192. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80),

and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

193. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

194. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

195. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

196. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

197. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

198. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

199. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

200. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

201. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to

an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

202. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

203. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

204. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

205. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

206. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

207. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

208. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

209. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

210. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to

an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

211. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

212. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

213. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

214. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

215. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

216. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

217. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

218. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

219. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

220. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

221. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

222. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

223. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

224. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

225. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

226. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

227. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

228. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

229. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

230. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

231. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

232. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

233. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

234. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-4 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

235. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL

which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

236. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

237. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

238. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

239. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the

antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

240. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

241. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

242. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

243. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

244. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

245. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

246. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

247. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

248. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to

an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

249. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

250. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

251. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

252. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

253. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

254. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

255. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

256. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

257. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to

an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

258. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

259. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

260. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

261. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

262. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

263. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

264. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

265. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

266. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

267. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

268. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

269. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

270. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

271. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

272. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

273. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

274. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

275. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

276. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

277. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

278. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

279. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IL-1 complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

280. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

281. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

282. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

283. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

284. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

285. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

286. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL

which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

287. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

288. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

289. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

290. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor

(CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

291. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

292. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

293. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

294. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified class 424, subclass 179.1.

295. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

296. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

297. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

298. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

299. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds

to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

300. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

301. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

302. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

303. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the

antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

304. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

305. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

306. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

307. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

308. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

309. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

310. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

311. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

312. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

313. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

314. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

315. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

316. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

317. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

318. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

319. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

320. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

321. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

322. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

323. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

324. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-IFNγ complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

325. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

326. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

327. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

328. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

329. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

330. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

331. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

332. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL

which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

333. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

334. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

335. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

336. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80),

and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

337. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

338. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

339. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

340. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

341. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

342. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

343. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

344. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

345. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which

binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

346. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

347. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

348. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

349. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is

DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

350. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

351. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

352. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

353. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

354. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

355. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

356. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

357. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

358. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

359. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an

APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

360. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

361. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

362. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

363. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

364. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

365. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

366. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

367. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

368. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

369. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-GM-CSF complex comprising VH and VL which binds to an

APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

370. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

371. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

372. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

373. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

374. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

375. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

376. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

377. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

378. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which

binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 179.1.

379. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

380. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified i

381. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

382. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

383. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

384. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

385. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen- TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

386. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

387. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR),

and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 179.1.

388. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

389. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

390. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

391. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

392. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

393. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

394. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

395. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

396. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR),

and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 179.1.

397. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

398. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

399. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

400. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

401. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

402. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

403. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

404. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

405. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 179.1.

406. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR),

and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

407. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

408. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

409. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

410. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

411. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC

surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

412. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

413. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

414. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 26 in part, drawn to scFv-antigen-TNF complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 179.1.

415. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

416. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein

the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

417. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

418. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

419. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

420. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

421. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

422. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

423. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

424. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

425. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen- LPS or other cell wall component complex

comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

426. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

427. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

428. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

429. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein

the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

430. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

431. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

432. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

433. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

434. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

435. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

436. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

437. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

438. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex

comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

439. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

440. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

441. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

442. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is

mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

443. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

444. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

445. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

446. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

447. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

448. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

449. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

450. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

451. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH

and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

452. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

453. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

454. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

455. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is

CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

456. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

457. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

458. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

459. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- LPS or other cell wall component complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

460. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

461. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

462. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

463. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

464. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex

comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

465. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

466. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

467. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

468. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein

the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

469. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

470. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

471. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

472. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

473. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

474. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

475. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

476. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

477. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH

and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

478. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

479. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

480. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

481. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is

B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

482. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

483. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

484. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

485. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

486. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

487. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

488. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

489. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

490. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL

which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

491. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

492. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

493. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

494. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like

receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

495. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

496. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

497. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

498. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

499. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

500. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

501. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

502. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

503. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL

which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

504. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- non-methylated CpG motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

505. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

506. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

507 Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the

molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

508. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-double-stranded RNA motif complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

509. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

510. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

511. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, 21-25, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

512. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

513. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, 21-22, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 181.1.

514. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

515. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen- double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

516. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and

VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

517. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

518. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

519. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

520. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is

DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

521. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

522. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 181.1.

523. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

524. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

525. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

526. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

527. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

528. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

529. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH

and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

530. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

531. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, 20 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 181.1.

532. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

533. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is chemokine

receptor (CCR1), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

534. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen- double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

535. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

536. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

537. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

538. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

539. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

540. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is a Chlamydia antigen, classified in class 424, subclass 181.1.

541. Claims 1-2, 3 in part and 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

542. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which

binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

543. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

544. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

545. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

546. Claims 1-2, 3 in part, 5-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

547. Claims 1-2, 3 in part, 4, 6-10, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

548. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

549. Claims 1-2, 3 in part, 6-8, 11, 14, 15, 19 in part, and 27 in part, drawn to scFv-antigen-double-stranded RNA complex comprising VH and VL which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is an Ehrlichia antigen, classified in class 424, subclass 181.1.

550. Claims 28, 29 in part, 32 in part, 33-35, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 197.11.

551. Claims 28, 29 in part, 32 in part, 33-35, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an

APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 197.11.

552. Claims 28, 29 in part, 32 in part, 33-35, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 197.11.

553. Claims 28, 29 in part, 32 in part, 33-35, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 197.11.

554. Claims 28, 29 in part, 32 in part, 33-35, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 197.11.

555. Claims 28, 29 in part, 31, 32 in part, 33-35, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 197.11.

556. Claims 28, 29 in part, 30, 32 in part, 33-35, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 197.11.

557. Claims 28, 29 in part, 32 in part, 33-35, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 197.11.

558. Claims 28, 29 in part, 32 in part, 33-35, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen 85B, classified in class 424, subclass 197.11.

559. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 197.11.

560. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1),

and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 197.11.

561. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 197.11.

562. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 197.11.

563. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 197.11.

564. Claims 28, 29 in part, 31, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 197.11.

565. Claims 28, 29 in part, 30, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 197.11.

566. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 197.11.

567. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen MPT64, classified in class 424, subclass 197.11.

568. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is mannose receptor (MR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 197.11.

569. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is chemokine receptor (CCR1), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 197.11.

570. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC

surface molecule, wherein the molecule is B7-1 (CD80), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 197.11.

571. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is B7-2 (CD86), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 197.11.

572. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is CD40, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 197.11.

573. Claims 28, 29 in part, 31, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is CD11c, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 197.11.

574. Claims 28, 29 in part, 30, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is DEC205, and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 197.11.

575. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is Toll-like receptor, and the

antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 197.11.

576. Claims 28, 29 in part, 32 in part, drawn to T-cell inducing fusion protein comprising APC binding protein and antigen which binds to an APC surface molecule, wherein the molecule is Fcγ receptor ((FcγR), and the antigen is Mycobacterial antigen ESAT-6, classified in class 424, subclass 197.11.

B. Polynucleotides:

577-631, Claims 36-43, drawn to a polynucleotide and a vector comprising the polynucleotide wherein the polynucleotide encodes a single polypeptide selected from one of Groups 1-54, classified in class 536, subclass 23.53 and/or 23.7.

C. Methods:

632-676, Claim 44, drawn to in vitro methods for APC or DC uptake of a single scFv-antigen-lipid complex selected from one of Groups 55-99, classified in class 424, subclass 181.1.

677-721, Claim 45, drawn to methods for introducing into an APC or DC by administering into a patient, a single scFv-antigen-lipid complex selected from one of Groups 55-99, classified in class 424, subclass 181.1.

722-776, Claim 46, drawn to methods for introducing into an APC or DC by administering into a patient, a polynucleotide encoding a single scFv or an scFv-antigen complex selected from one of Groups 577-631, classified in class 514, subclass 44.

777-821 Claim 47, drawn to immune response inducing methods comprising contacting, ex vivo, an APC or DC with a single scFv-antigen-lipid complex selected from one of Groups 55-99 and administering the DC/ or APC/scFv-antigen-lipid into a patient, classified in class 424, subclass 181.1.

822. Claims 48-49, drawn to methods for blocking APC or DC target molecules comprising interacting the target molecule from an explanted APC or DC with an scFv, wherein the target molecule is mannose receptor (MR), classified in class 424, subclass 135.1.

823. Claims 48-49, drawn to methods for blocking APC or DC target molecules comprising interacting the target molecule from an explanted APC or DC with an scFv, wherein the target molecule is chemokine receptor (CCR1), classified in class 424, subclass 135.1.

824. Claims 48-49, drawn to methods for blocking APC or DC target molecules comprising interacting the target molecule from an explanted APC or DC with an scFv, wherein the target molecule is B7-1 (CD80), classified in class 424, subclass 135.1.

825. Claims 48-49, drawn to methods for blocking APC or DC target molecules comprising interacting the target molecule from an explanted APC or DC with an scFv, wherein the target molecule is B7-2 (CD86), classified in class 424, subclass 135.1.

826. Claims 48-49, drawn to methods for blocking APC or DC target molecules comprising interacting the target molecule from an explanted APC or DC with an scFv, wherein the target molecule is CD40, classified in class 424, subclass 135.1.

827. Claims 48-49, drawn to methods for blocking APC or DC target molecules comprising interacting the target molecule from an explanted APC or DC with an scFv, wherein the target molecule is CD11c, classified in class 424, subclass 135.1.

828. Claims 48-49, drawn to methods for blocking APC or DC target molecules comprising interacting the target molecule from an explanted APC or DC with an scFv, wherein the target molecule is DEC-205, classified in class 424, subclass 135.1.

829. Claims 48-49, drawn to methods for blocking APC or DC target molecules comprising interacting the target molecule from an explanted APC or DC with an scFv, wherein the target molecule is Toll-like receptor (TLR) classified in class 424, subclass 135.1.

830. Claims 48-49, drawn to methods for blocking APC or DC target molecules comprising interacting the target molecule from an explanted APC or DC with an scFv, wherein the target molecule is Fcγ (FcγR), classified in class 424, subclass 135.1.

3. The inventions are distinct and separate for the following reasons:

Inventions of Groups 1-576 (polypeptides) and Groups 577-631 (polynucleotides) represent separate and distinct products which are made by materially different methods, and are used in materially different methods which have different modes of operation, different functions and different effects.

Each of the polypeptides is distinct from the other as comprising different amino acid sequences, having different functional protein components, and some of which are further bound to lipids. One of ordinary skill in the art could readily access as, for example, any commercial Table of Cluster of Differentiation antigens, the Human

Protein Reference Database (hprd.org) or a general textbook of immunology ("Fundamental Immunology", William Paul, Lippincott Williams & Wilkins; 4th Bk&Cdr edition (January 15, 1999)) to appreciate that the antigens, receptor molecules to which scFv are directed, cytokines and any other functional components comprising the scFv or scFv/antigen complex, would each possess unique properties much less confer unique properties when combined to create an inventive polypeptide. Each of the polynucleotides is distinct from the other as comprising different amino acid sequences.

A DNA's structure is comprised of linear, contiguous nucleotides while a protein's structure comprised of linear, contiguous amino acids that fold into a specific three-dimensional structure; the DNA's function is to encode a protein while a protein's function is variable, and in this case, undefined. Additionally, the DNA and polypeptides are not obvious variants of each other based on the distinct structures and functions of each as noted above. Lastly, the DNA and polypeptides have materially different functions as noted above.

Furthermore, the polynucleotides can be used for hybridization screening, and the polypeptides can be used for methods of treatment or to immunopurify a targeted binding protein to which a component of the polypeptide is directed. The examination of all groups would require different searches in the U.S. Patent shoes and the scientific literature and would require the consideration of different patentability issues. Thus the inventions of Groups 1-631 are patentably distinct.

4. While Groups 1-576 and Groups 577-631 can be identically classified under U.S. Patent Classification guidelines, to search them together would present a search burden

on the Examiner due to the extensive databases of non-patent literature. For example, claims in Groups 1-576, drawn to polypeptides, must be searched not only in commercial amino acid sequence databases, but also in textual databases because isolated polypeptides are often disclosed without the benefit of sequence information although the amino acid sequence is inherently the same as the sequence claimed. Additionally, the DNA sequences must be searched in distinct nucleic acid sequence commercial databases. Thus, Groups 1-576 and Groups 577-631 have been appropriately restricted on the basis of being both independent or distinct and presenting a search burden on the Examiner if they were to be searched together.

5. The methods of Groups 632-830 differ in the method objectives, method steps and parameters and in the reagents used. Each of the methods differ as follows: the methods of Groups 632-676 requires that an explanted APC or DC from a patient be contacted with an scFv/antigen-lipid complex where for each of the scFv/antigen-lipid complexes, the antigen and target molecule differs, in order for the APC or DC to incorporate the complex; the methods of Groups 677-721 requires that a patient be administered an scFv/antigen-lipid complex where for each of the scFv/antigen-lipid complexes, the antigen and target molecule differs, in order to incorporate the complex into an APC or DC; the methods of Groups 722-776 requires that a patient be administered a polynucleotide encoding an scFv or scFv/antigen complex where each scFv differs or for each of the scFv/antigen complexes, the antigen and target molecule differs, in order to incorporate the complex into an APC or DC; the methods of Groups 777-821 requires explanting APC or DC from a patient and contacting the cells with an

scFv-antigen-lipid complex, where for each of the scFv/antigen-lipid complexes, the antigen and target molecule differs, in order to administer the APC- or DC-bound complex to the patient to induce an immune response; and the methods of Groups 823-830 requires explanting APC or DC from a patient and contacting the cells with an scFv directed to a different surface molecule for each of the groups, in order to block or inhibit the activity of the surface molecule. The examination of all groups would require different searches in the U.S. PATENT shoes and the scientific literature and would require the consideration of different patentability issues. Thus Inventions of Groups 632-830 are separate and distinct in having different method steps, endpoints, intended populations and reagents and are patentably distinct.

6. Searching the inventions would also impose a serious search burden given the inordinate number of claimed combinations. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

7. Inventions of Groups 55-99 and Groups 632-676; Groups 55-99 and Groups 677-721; Groups 577-631 and Groups 722-776; and Groups 55-99 and Groups 777-821 are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, each of the polypeptides can be used to make

antibodies or in immunoassays for screening or purifying antibodies or proteins in addition to being used in other materially different processes. The examination of all groups would require different searches in the U.S. PATENT shoes and the scientific literature and would require the consideration of different patentability issues. Thus Inventions of Groups 55-99 and Groups 632-676; Groups 55-99 and Groups 677-721; Groups 577-631 and Groups 722-776; and Groups 55-99 and Groups 777-821 are patentably distinct.

8. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

10. If any one of Groups 1-549 is elected, then species below must be elected as applicable. This application contains claims directed to the following patentably distinct species of the claimed invention:

Specie A) chemical crosslink between scFv and antigen

Specie B) fusion protein between scFv and antigen

The species represent chemically and structurally different molecules, and the method steps required to obtain either a chemically cross-linked complex versus a fusion protein involves different steps, reagents and product outcomes.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, Claim 1 is generic as to species A and B.

Additionally, searching all of the species of would be burdensome for the examiner because the searches would not be co-extensive as a result of each of the having obtained a separate technical status in the art.

11. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim

is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynn Bristol whose telephone number is 571-272-6883. The examiner can normally be reached on 8:00-4:00, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Helms can be reached on 571-272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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